

BORISOV, I.N. (Arkhangel'sk)

Technique of staining with methylene pyronine green. Arkh. pat.
25 no.3:81-83 '63. (MIRA 17:12)

1. Kafedra gistologii i embriologii (zav. ... dotsent V.S. Chikunova)
Arkhangel'skogo meditsinskogo instituta.

BORISOV, I.P.

Nuclein acids in the histogenesis of the striated muscles of the pig. TSitologiya 2 no.4:466-469 J1-Ag '60. (MIRA 13:9)

1. Kafedra gistologii i embriologii Leningradskogo veterinarnogo instituta.

(NUCLEIC ACIDS)

(MUSCLE)

BORISOV, I.P., zazluzhennyy vrach RSFSR

New modification of the operative treatment of rectal prolapse.
Elem.prokt. no.2:95-97 '60. (MIRA 14:11)

1. Iz Tikhvinskoy gorodskoy bol'nitsy Leningradskoy oblasti
i iz kafedry gosptal'noy khirurgii Kuybyshevskogo meditsinskogo
instituta.

(RECTUM--SURGERY)

BORISOV, I. S.

PA 18/49T24

USSR/Engineering
Pipe, Steel
Rolling Mills

Dec 48

"Review of Yu. I. Nikolayevskiy's Book, 'Rolling and Finishing Steel Pipe,'" I. S. Borisov, Yu. M. Matveyev, Candidates Tech Sci, 4 $\frac{1}{2}$ pp

"Stal'" No 12

Book contains many errors and cannot be used as a handbook. Does not present up-to-date picture of present state of USSR industry. Useful as introduction to fundamentals of subject. Published by Metallurgizdat, Khar'kov-Moscow, 1948, 438 pp, 211 sketches.

18/49T24

STUKALO, I.T., prof.; BORISOV, I.S.

Interval Q-T of the electrocardiogram in the diagnosis of rheumatic diseases of the heart. Vrach. delo no.8:43-45 Ag '60. (MIRA 13:9)

1. Kafedra propedeuticheskoy terapii (zav. - prof. I.T.Stukalo)
pediatricheskogo i sanitarno-gigiyenicheskogo fakul'tetov L'vovskogo
meditsinskogo instituta.
(ELECTROCARDIOGRAPHY) (RHEUMATIC HEART DISEASE)

CHERDYNTSEV, V.V.; MALYSHEV, V.I.; KAZACHEVSKIY, I.V.; BORISOV, I.V.

Isotopic composition of uranium and thorium in the zone of supergenesis.
Studies of the peat bog matter. Geokhimiia no.5:399-403 My '64.
(MIRA 18:7)

1. Geological Institute of the Academy of Sciences, U.S.S.R., Moscow.

DMITRIYEV, I.S., kand. tekhn. nauk, dots.; BORISOV, I.V., inzh.;
KRYUKOVSKIY, N.N., inzh.; MODEL', B.I., tekhn. red.

[Investigations and industrial practice in welding] Issledovaniia i proizvodstvennyi opyt po svarke. Moskva, Mashgiz, 1955. 221 p. (MIRA 16:7)

1. Vsesoyuznoye nauchnoye inzhenerno-tekhnicheskoye obshchestvo svarochnogo dela. (Welding)

BORISOV, K.

How to conduct reports and elections in primary trade-union
organizations. Sov.profsoluzy 7 no.19:49-52 0 '59.
(MIRA 13:2)

1. Zamestitel' zaveduyushchego organizatsionno-instruktorskim
otdelom Vsesoyuznogo tsentral'nogo soveta profsoyuzov.
(Trade unions)

BORISOV, K.

How to conduct reports and elections in a trade-union group.
Sov.profsoiuzy 16 no.17:51-52 S '60. (MIRA 13:8)

1. Zamestitel' zaveduyushchego organizatsionno-instruktorskim
otdelom Vsesoyuznogo tsentral'nogo soveta profsoyuzov.
(Trade unions)

BORISOV, K.

Academic decorations of honor for graduates of the Higher School of Trade Unionism. Sov.profsoiuzy 17 no.12:34 Je '61. (MIRA 14:6)

1. Zamestitel' zaveduyushchego organizatsionno-instruktorskim otdelom Vsesoyuznogo tsentral'nogo Soveta professional'nykh soyuzov.

(Decorations of honor, Academic)

BORISOV, K.

A strict review. Sov. profsoiuzy 17 no.21:36-37 N '61.(MIRA 14:10)

1. Zamestitel' zaveduyushchego organizatsionno-instruktorskhim
otdelom Vsesoyuznogo tsentral'nogo soveta professional'nykh
soyuzov.

(Trade unions)

BORISOV, K.

New development in trade-union membership records. Sov.
profsoiuzy 19 no.1:18 Ja '63. (MIRA 16:1)

1. Zamestitel' zaveduyushchego organizatsionno-instruktorskim
otdelom Vsesoyuznogo tsentral'nogo soveta professional'nykh
soyuzov.

(Trade unions--Accounting)

KULIKOV, P., inzh.; ARBUZOV, N., inzh.-mekhanik; BORISOV, K., inzh.-konstruktor

Textbook for diesel engine operators and repairmen. Mor. flot 24 no.9:
45 S '64. (MIRA 18:5)

1. Tekhnicheskly otel Izmail'skogo porta (for Kulikov).

GUDIM-LEVKOVICH, N.M., kandidat tekhnicheskikh nauk; BORISOV, K.A., konstrukter.

Modernization of machinery. Vest.mash.36 no.7:67-69 J1 '56.
(Machine tools) (MIRA 9:9)

BORISOV, K.A.

BARILENKO, V.P., assistant; BORISOV, K.A., promyshlennyy sanitarnyy vrach

Control of compliance with health regulations in designing agricultural machinery. Gig. i san. 22 no.7:83-84 J1 '57. (MIRA 10:10)

1. Iz Denpropetrovskoy oblastnoy sanitarno-epidemiologicheskoy stantsii i Denpropetrovskogo meditsinskogo instituta.

(AGRICULTURE,

safety rules in machine shops (Rus))

PHASE I BOOK EXPLOITATION

SOV/5314

Sergeyev, G. Ya., V.V. Titova, and K.A. Borisov

Metallovedeniye urana i nekotorykh reaktornykh materialov (The Metallography of Uranium and Certain Reactor Materials) Moscow, Atomizdat, 1960. 223 p. 5,000 copies printed.

Ed.: A.I. Zavodchikova, Tech. Ed.: N.A. Vlasova.

PURPOSE: This book is intended for scientists and engineers in scientific research institutes, design and planning organizations, and industrial enterprises. It may also be used by students taking advanced courses in higher schools of education.

COVERAGE: The book on the metallography of uranium and reactor materials contains data taken from Soviet and non-Soviet materials presented at the Second International Conference on the Peaceful Uses of Atomic Energy (Geneva, 1958), and from later sources dealing specifically with the effects of conditions in the active zone of a reactor on the properties (especially size and structural stability) of uranium, its alloys, and

Card 1/8

The Metallography of Uranium (Cont.)

SOV/5314

structural materials used in fuel elements with all-metal cores. Computational data and information on the design and operation of nuclear reactors and the production of fuel elements are also given. The thermal and thermomechanical processing of uranium, the effect of radiation and heating cycles on size stability, and the physicomachanical properties of uranium and its alloys and of structural materials are discussed. No personalities are mentioned. There are 170 references: 75 Soviet (including translations), 88 English, 5 French, and 2 German.

TABLE OF CONTENTS:

Introduction	3
Ch. I. Working Conditions of Nuclear Fuel and Structural Materials in Reactors	5
Ch. II. Structure and Physical Properties of Uranium	18
1. Structure	18
2. Density and thermal expansion	22
3. Thermodynamic properties	25
4. Heat conductivity	28
5. Electrical properties	29

Card 2/8

1. BORISOV, K.I.
2. USSR (600)
4. Gas Generators
7. Improving the design of small-capacity gas generators, Stek.i ker. 10 no. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

BORISOV, Konstantin Ivanovich; GRECHISHKIN, Petr Borisovich; POPOV, Petr Konstantinovich; KUZNETSOVA, N.I., red.; KOROBOVA, N.D., tekhn. red.

[Trade-union work in the organization of the masses; collection of guiding materials] Organizatsionno-massovaia rabota profsoiuzov; sbornik rukovodiashchikh materialov. Moskva, Profizdat, 1962. 270 p. (MIRA 15:8)
(Trade unions--Handbooks, manuals, etc.)

USSR/ Chemistry - Glass utensils

Card : 1/1 Pub. 104 - 8/12

Authors : Kachalov, N. N., Yevstrop'ev, K. S. Dubrovo, S. K., Lipkin, V. M. and
Borisov, K. I.

Title : Glass for utensils of chemical laboratories

Periodical : Stek. i ker. 11/7, 20 - 23, June 1954

Abstract : The article deals with experiments conducted in order to obtain a glass that could be produced in large quantities, be cheap, and still be suitable for chemical laboratory utensils. Such glass is intended to be resistant to heat and acids. The presence of boric anhydride in glass as an ingredient is found to improve its quality. From experimentation a glass designated as No. 29 was produced and a comparison of its properties with the No. 23 (formerly the best) is found to put it in first place. Tables; graph; illustrations.

Institution : ...

Submitted : ...

BORISOV, K. I.

USSR/ Chemistry - Laboratory glass

Card 1/1 Pub. 104 - 13/14

Authors : Borisov, K. I.

Title : ~~Improvement of the quality of chemical-laboratory glass~~
Improvement of the quality of chemical-laboratory glass

Periodical : Stek. i ker. 11/11, 29-30, Nov 1954

Abstract : An account is given of experiments conducted for the purpose of developing glass that would withstand the action of various reagents, very-high temperatures and sudden temperature changes. Two types of glass, Ts32 and TsL, developed with these properties are described and their composition is given. Table

Institution:

Submitted:

Borisov, K. I.

USSR/Miscellaneous - Glass furnaces

Card 1/1 Pub. 104 - 5/8

Authors : Borisov, K. I.

Title : Cooling of glass furnaces

Periodical : Stek. 1 ker. 3, 18-23, Mar 1955

Abstract : Several types of water cooling systems for glass furnaces are described. Experiments showed that a reduction in temperature of the glass mass coming in contact with interior refractories of the furnace will reduce the rate of motion of the mass and at the same time reduce the diffusion of alkalis. Temperature reduction of the glass mass (by means of a water cooling system) is considered the decisive factor in reducing the rate of corrosion of the refractory blocks and in decreasing the number of flaws due to the penetration of corrosive agents into the glass mass. Three USSR references (1937-1953). Tables; drawings.

Institution :

Submitted :

BORISOV, K.I.

Glass manufacture in Poland. Stok. 1 kor. 13 no. 8:30-31 Ag '56.
(Poland-Glass manufacture) (MIRA 9:10)

AUTHORS: Borisov, K. I., and Svetlov, A. A. 72-2-6/10

TITLE: Progressive Method of Air Cooling of Bath Furnaces (Progressivnyy sposob vozdushnogo okhlazhdeniya vannyykh pechey).

PERIODICAL: Steklo i Keramika, 1957, Vol. 14, No. 2, pp. 22-25 (U.S.S.R.)

ABSTRACT: Reference is made to the empirical norms in use for air supply in cooling parts of glass furnaces to prevent etching away of the upper bars. The system based on these norms is found to be very complicated. A new centralized system is described and illustrated by three sketches. In sketch 1 1, e, and 4 are centrifugal fans (3 is a centrifugal fan placed on the floor of the shop--I variation; 4 is a centrifugal fan placed in the ventilation chamber located outside on brackets, II variation); 2 is an angular blow tube. In sketch 2 1 is a centrifugal fan; 2 is a blow nozzle; 3 is the metallic suspension arrangement.

Card 1/2

Progressive Method of Air Cooling of Bath Furnaces 72-2-6/10

In sketch 3 1 is a centrifugal fan placed on the platform in a special chamber; 2 is the gate valve; 3 is the blow nozzle for cooling the top bar of the bath of the furnace located in the basin on the upper level of the glass mass; 4 is the metallic suspension of the air ducts.

ASSOCIATION:

PRESENTED BY:

SUBMITTED:

AVAILABLE: Library of Congress

Card 2/2

Тема	The Production of Glass in the Ukrainian SSR (Kontseptsionnoe Rasvivat' proizvodstvo stekla v USSR) From the Technical Conference of Representatives of the Glass Industry (S tekhnicheskogo soveshchaniya rabotnikov stekol'noy promyshlennosti).
Источники	Steklo i Keramika, 1958, Nr. 2, pp. 45-45 (USSR)
Аннотация	This conference was called by the Ministry for the Industry of Building Materials of the Ukrainian SSR as well as by the Ukrainian and Stalin-Regional NTO for Building Materials and took place on December 10-12, 1957 at Konstantinovka. The minister for the building material industry of the Ukrainian SSR, Moroz, opened the conference and stressed the fact that the production of glass must be increased. The following reports were further delivered: 1.) Patenko, (Deputy Minister for the Building Material Industry) spoke about the present stage of the glass industry, and pointed out what work must be carried out in future. 2.) Solinov (Director of the Institute for Glass) gave a report concerning new kinds of glass products for dwelling and industrial buildings and how they are to be properly used in practice.
Санд 1/5	

The Production of Glass in the USSR
Developed From the Technical Conference of Representatives
of the Glass Industry

- 3.) Dubrovskiy (Director of the Ukrainian Branch of the Institute for Glass) described the work carried out by this Institute.
- 4.) Tykachinskiy (Institute for Glass) gave a detailed description of the part played by the factors determining the intensity of the process of glass melting.
- 5.) Zhirnov ("Proletariy" plant) spoke about the success achieved by this plant.
- 6.) Lev (Representative of the Giprosteklo Institute) spoke about the distribution of new products.
- 7.) Alekseyev (Academy for Building and Architecture of the USSR) spoke about the assortment, quality, and value of building glass.
- 8.) Il'inskiy (Head of the Pyrometric Department of the Giprosteklo) spoke about the perfecting of glass smelting furnaces during future repair work.
- 9.) K.I. Borisov (PGB of the Institute for Glass) spoke about improved constructions of glass smelting furnaces and flues.

Development of Glass in the Ukrainian SSR Must be
Accelerated, From the Technical Conference of Representatives
of the Glass Industry

72-2-13/20

- 10.) Solomin, Professor (Institute for Glass) spoke about re-
fractories for tank furnaces.
- 11.) Fronin (Lisichansk Works) reported about glass products of
high stability.
- 12.) Boudarev (Director of the "Avtozavod" Works, Komsomolsk) dealt
with prospects for building glass.
- 13.) Firer (Representative of the Canal Plant) spoke about the
production and use of glass tubes and foam glass.
- 14.) Zakhov (Director of the Plant named October Revolution) spoke
about the prospects of the production of special glass pro-
ducts.
- 15.) Bashbayev-Melikov (Scientific Collaborator of the Institute for
Glass) gave a report on building glass blocks.
- 16.) Abakumov (Chief Engineer of the Shopting Works) spoke about
production of glass blocks in this plant.
- 17.) Shatkhin (Institute for Glass), Polil (Institute for Glass
Fibres), Koryagina (Ivotak Plant) spoke about glass fibres.

72-2-13/20

The Production of Glass in the USSR
Developed from the Technical Conference of Experts
of the Glass Industry

- 18.) Perederiyenko (Director of the Glass Works at GUM) spoke about plate glass of high quality.
- 19.) Myasnikov (Deputy of the Polytechnic Institute of Kiev) spoke about the production of glass tiles.
- 20.) Resnikov (FAB of the Institute for Glass) spoke about "stekl" Works, Konstantinovka, Dolbin (Proletary, GUM), Kolesnikov (Plant named October Revolution), Zhukov (KUM, MPSM Ukrainian SSR) spoke about problems of mechanization.
- 21.) Pod'yel'skiy spoke about the packing of glass.
- 22.) Baklanov (Head of the Sovnarkhose Stalinak) spoke about the development of new building materials in that province.
- 23.) Potanin (Deputy Chief of the Department for Building Materials of the Gosplan USSR) spoke about general problems of the glass industry.

Decisions were made with a view of increasing the efficiency and the quality of the products of glass works and the work of the industry.

GA-4/5

The production of glass in the Ukrainian branch is based on the technology developed from the Technical Conference of the Glass Industry of the Glass Industry

refractories. On the basis of the Ukrainian branch it is known that a Ukrainian Scientific Research Institute for glass is established at Konstantinovka.

ATTN: Mr. [REDACTED]
6/15/55

15(2)

AUTHOR: Borisov, K. I.

SOV/72-58-12-6/23

TITLE: The Furnace Tank Air Cooling Must Be Intensified (Usilit' vozdushnoye okhlazhdeniye basseyna pechey)

PERIODICAL: Steklo i keramika, 1958, Nr 12, pp 23 - 23 (USSR)

ABSTRACT: Melting processes must be intensified in order to increase glass production. The only solution is to increase melting temperatures. Until lately, melting temperatures were not increased in glass factories, in order to prevent a premature destruction of furnace linings. Tests showed, however, that such a destruction can be efficiently prevented by air cooling of the refractory tank bricks. In the USA, tank linings are air cooled at the level of the glass mass surface at a 100 mm water-column pressure. For each 1 m length of the cooled glass beam, an air quantity of 4000 m³ per hour is required. In Soviet projects, air consumption calculations call for 1400-1500 m³ per hour theoretically, which practically means about 1000 m³ per hour and represents only one quarter of the air quantity used

Card 1/2

The Furnace Tank Air Cooling Must Be Intensified

SOV/72-58-12-6/23

in the USA. Air consumption in Soviet furnaces should be made to conform to foreign standards. Air cooling must be introduced not earlier than 2-3 months after the furnace has been put into operation and should be directed to the glass beam spots, where destruction is heaviest. This can be effected by means of an air cooling system worked out by the proyektno-konstruktorskoye byuro Instituta stekla (Planning and Design Office of the Glass Institute). By the introduction of this system, melting temperatures are allowed to increase to 1500-1520°, also with refractories used at present, and furnace campaign as well as output are thus increased. The board of editors further states that besides intensifying air cooling, also the heat stability of tank refractories should be increased.

Card 2/2

BORISOV, K.I.

The glass industry of the People's Republic of Bulgaria. Stek.i
ker. 19 no.4:43-44 Ap '62. (MIRA 15:8)
(Bulgaria--Glass manufacture)

BORISOV, Konstantin Ivanovich; KHVOSTOVA, D.M., red.

[Talks about the statutes of the trade unions of the
U.S.S.R.] Besedy ob ustave profsoiuzov SSSR. Moskva,
Profizdat, 1964. 95 p. (Biblioteka profsoiuznogo ak-
tivista, no.13(85)) (MIRA 17:6)

BORISOV, K. M.

The SP-180-I high-speed beam warping machine with the Sh-1000-I
bobbin holder for intermittent warping. *Biul. tekhn.-ekon.*
inform. Gos. nauch.-issl. inst. nauch. i tekhn. inform. no.12:
48-50 '62. (MIRA 16:1)
(Textile machinery)

BORISOV, K. N. ENGINEER

Cand Tech Sci

Dissertation: "Investigation of the Operation of a Controllable Ferro
Reactor".

27 June 49

Moscow Order of Lenin Aviation Inst
imeni Sergo Ordzhomikidze

SO Vecheryaya Moskva
Sum 71

BORISOV, K.N.

"Use of Saturable Reactors in Circuits for Regulating Electric Furnaces"
Docent K.N. Borisov, Cand Tech Sci

Elektrichestvo, no. 4, pp 44-47, April 1954

Examines advantages of using saturable reactors in elec resistance furnaces. Takes up in detail problem of effect of low pf on losses in network and transformers. Notes possibility of reducing power of transformer substations for heating shops. Submitted 29 Sep 52

258T27

AID P - 3552

Subject : USSR/Electricity

Card 1/1 Pub. 29 - 16/27

Author : Borisov, K. N., Eng.

Title : ~~UNRECORDED COPY~~ Unsuitable use of transformers of the AOSK, ATSK and ATMK types

Periodical : Energetik, 11, 21-22, N 1955

Abstract : The author quotes some instances in which autotransformers of the AOSK, ATSK and ATMK types were used. These transformers have a smooth voltage regulation and were used to regulate the temperature of electric furnaces. The author used iron-core saturable reactors in this case and describes their advantages as compared with the above transformers. One drawing.

Institution : None

Submitted : No date

621.316.718.5 : 621.314.65 : 621.318.435.3
 5386. SPEED REGULATION OF A D.C. MOTOR BY TRANS-
 DUCTION AND SEMICONDUCTORS. *K.N. Borisev.* *Elitig*
 Elektrichstvo, 1957, No. 2, 40-3. In Russian.

A simple theoretical analysis of a regulation circuit comprising a saturable reactor and a full-wave rectifier, represented by an equivalent circuit in which the motor is replaced by a variable resistance, enables the elliptic form of the voltage-current relation in this circuit to be used to obtain a rapid assessment of the regulating characteristics. This is followed by a determination of the losses in the reactor during the regulation process. As example of a regulation system of practical importance, Larionov's three-phase regulation circuit is considered. The advantages of similar systems are: wide speed control range; absence of rotating machines in the control circuit; high efficiency of the system; small controlling power; simplicity and reliability. Disadvantages: Inertia, due to great time constant of reactor; efficiency falling with falling speed of motor; reversing becomes more difficult, as it requires a reversing bridge circuit or second rectifier system such as used, e.g. in electronic converter control circuits; impossibility of recuperative braking. However, the control may be applied to a wide range of motor ratings (up to 10 kW) and may sometimes replace generator-motor systems.

B.F. Kraus

JK
0506

BORISOV, K.N., kand. tekhn. nauk

Theory of voltage pulse regulation at active loads. Trudy MAI
no.133:141-151 '61. (MIRA 14:5)
(Voltage regulators)

BP

PHASE I BOOK EXPLOITATION

SOV/6222

Borisov, Konstantin Nikolayevich

Osnovy aviatsionnogo elektroprivoda. Ch. 1: Nereguliruyemyy privod (Fundamentals of Aircraft Electric Drives. Pt. 1: Uncontrolled Drive). Moscow, Oborongiz, 1962. 203 p. Errata slip inserted. 6150 copies printed.

Sponsoring Agency: Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya RSFSR. Moskovskiy ordena Lenina aviatsionnyy institut imeni Sergo Ordzhonikidze.

Ed. (Title page): Yu. A. Popov, Professor; Ed.: Yu. G. Zakharov, Candidate of Technical Sciences; Ed. of Publishing House: I. P. Kurbakova; Tech. Ed.: L. A. Garnukhina; Managing Ed.: A. S. Zaymovskaya, Engineer.

PURPOSE: This textbook is intended for students in electromechanical specialties. It may also be useful to engineers working in the field of aircraft electrical equipment design.

Card 1/4

Fundamentals of Aircraft (Cont.)

SOV/6222

COVERAGE: The book deals with general problems of electric drive mechanics, and with problems connected with the power selection for servomotor drives. Commutation equipment and control devices of electrical drives are briefly described and information is given on the composition of electrical control systems. Ch. VIII was written by G. Ya. Polyakov, Candidate of Technical Sciences. No personalities are mentioned. There are 16 references, all Soviet.

TABLE OF CONTENTS [Abridged]:

Foreword	3
Introduction	5
Ch. I. Basic Conditions of the Instrument's Mechanics	7
Ch. II. Properties of Electric Motors	19

Card 2/4

BORISOV, K.N., kand.tekhn.nauk; CHZHAN GUAN-ZHEN' [Chang Kuang-jên], inzh.

Plotting characteristics of a d.c. motor with choke
regulation of the speed of rotation. Trudy MAI no.145:41-45
'62. (MIRA 15:9)

(Electric motors, Direct current—Testing)

AVERINA, L.A.; BORISOV, K.N., kand.tekhn.nauk; RODINA, N.M.

Plotting mechanical characteristics of an electric motor
according to the results of the high-speed motion-picture
photography of its starting. Trudy MAI no.145:46-49 '62.
(MIRA 15:9)

(Electric motors--Testing)

BORISOV, K.Ye.; STIRIS, I.Ya., inzhener, nauchnyy redaktor; MALYSHEV, M.M.,
~~redaktor izdatel'stva~~; EL'KINA, E.M., tekhnicheskiy redaktor

[My experience in installing central heating systems] Moi opyt
montazha sistem tsentral'nogo otopeniia. Moskva, Gos.izd-vo
lit-ry po stroit. i arkhitekt., 1957. 34 p. (MLRA 10:7)

1. Instruktor peredovykh metodov truda instituta Organizatsii
Ministerstva stroitel'stva SSSR (for Borisov)
(Heating)

KOVRIGIN, S., kand. tekhn. nauk; BORISOV, L., insh.

Controlling the noise of pumping units. Na stroi. Mosk. 2 no.9:20-21
S '59. (MIRA 13:2)

(Pumping machinery--Noise)

CHIRKIN, O., inzh.; KUZ'MIN, V.; BORISOV, L.; ISHKIN, V.; SERENIYANNIKOV, G.

Information. Avt.transp. 42 no.12:52-54 D '64.

(MIRA 18:4)

L 7809-66 EWT(m)/EWP(j) RM

ACC NR: AP5028045

SOURCE CODE: UR/0046/65/011/004/0427/0433

AUTHOR: Borisov, L.A.

ORG: Scientific-Research Institute of Construction Physics, Moscow (N.-i. institut stroitel'noy fiziki)

TITLE: An experimental investigation of the effectiveness of sound-absorbing insulations

SOURCE: Akusticheskiy zhurnal, v. 11, no. 4, 1965, 427-433

TOPIC TAGS: acoustic noise, acoustic absorption, acoustic reverberation, insulating material, construction material, sound absorption, acoustic property, acoustic insulation

ABSTRACT: This article presents the results of experimental investigations of the effectiveness of sound-absorbing insulations in six reverberation chambers, 100 to 300 cubic meters in capacity. The chambers were selected on the basis of the condition established by V. V. Furduev (Snizheniye shuma pri akusticheskoy obrabotke shumnykh pomeshcheniy. Akust. zh., 1965, 11, 4, 481-486.) on achieving a maximum additional noise level reduction in a building after acoustic insulation of its surfaces. The conclusions reached after a comparison of the results obtained are presented. A reduction in the noise level in a building after acoustic insulation of its surfaces may exceed the value calculated on the basis of known formulas of the statistical theory of architectural acoustics. An optimal effect is achieved when the process of reverberation (which, prior to the insulation of the building, did not differ substantially from the exponential) as a result of the insulation ceases to follow the

Card 1/2

UDC: 534.833.532

L 7809-66

ACC NR: AP5028045

exponential law. The value of the additional reduction of the noise level depends on the method used for placing the insulating material: when it is concentrated this value is high. The shape and the capacity of the building affect the magnitude of the additional reduction of the noise level. In low buildings the effect is greater than in tall buildings. In large capacity buildings an additional reduction of the noise level depends not only on the quantity of the sound-absorbing material but also on the magnitude of the remaining uninsulated surface. The author expresses his gratitude to V. V. Furduev for supervising the work. Orig. art. has: 5 figures and 5 formulas.

SUB CODE: GO, GP / SUBM DATE: 04Aug64 / ORIG REF: 004 / OTH REF: 003

Card 2/2

LITVINOV, M.A.; BORISOV, L.B.

Materials on the experimental study of antibacterial properties
in higher basidial fungi. Trudy Bot.inst. Ser. 2, no. 8: 59-72 '53.
(MLRA 7:1)
(Basidiomycetes)

BORISOV, L.B.

USSR/Microbiology - General Microbiology.

F-1

Abs Jour : Ref Zhur - Biologiya, No 7, 1957, 26230

Author : Borisov, L.B.

Inst :

Title : Certain Biological Properties of Trichophyton Gypseum.

Orig Pub : V sb.: Eksperim. i klinich. issledovaniya. II, L.,
Medgiz, 1956, 49-50

Abst : T. gypseum was grown in liquid nutrient solutions in submerged and surface cultures and provided with various sources of nitrogen and carbohydrate nutrition. The fungus grew very slowly on solutions with mineral nitrogen sources, a thin cobweb-like film appearing in 10-14 days. Wort, peptone and maize extract are good sources of nitrogen, while nitrogen-containing substances in pea and yeast extract, alanin, asparagin and glyccol are the poorest. The best sources of carbon are glucose and mannite. The optimum proportions of peptone and glucose

Card 1/2

USSR/Microbiology - General Microbiology.

F-1

Abs Jour : Ref Zhur - Biologiya, No 7, 1957, 26230

in a solution are 0.5 and 3% respectively. Submerged cultivation greatly increases the rate of growth of the fungus. In wort, the first phase, characterized by intensive nitrogen consumption and the accumulation of a mass of thin poorly septitized mycelium, lasts 15 days in surface cultures, and 40 hours in submerged cultures. The second phase, characterized by the acidification of the solution and a relatively slight increase in the mycelium mass and subsequent autolysis, takes place over 40 days and 50-60 hours, respectively. A substantial crop of mycelium is obtained in submerged cultures in 80 to 90 hours, while the process takes 60 to 70 days in surface cultures.

Card 2/2

USSR/Microbiology - Medical and Veterinary.

F-4

Abs Jour : Ref Zhur - Biologiya, No 7, 1957, 26398

Author : ~~Borisov, L.B.~~

Inst : Leningrad Medical Institute of Sanitation and Hygiene

Title : An Experiment in the Subsurface Culture of Flexner and Sonne Dysentery Bacteria.

Orig Pub : Tr. Leningr. san.-gigien. med. in-ta, 1956, 30, 58-64

Abst : A description is given of a portable laboratory installation for the subsurface cultivation of bacteria. Curves are plotted for the growth of Sonne and Flexner bacteria under conditions of immersion. The agglutinability of immersed cultures was found to be considerably higher than that of the original strains. 3-4 hour cultures had the highest agglutinability, which subsequently decreased.

Card 1/1

Chau, Microbiology

BORISOV, L.B.

Laboratory apparatus for submerged cultivation of bacteria. Mikro-
biologiya 28 no.3:447-450 My-Je '59. (MIRA 13:3)

1. Leningradskiy sanitarno-gigiyenicheskiy meditsinskiy institut.
(BACTERIA, culture
appar. for submerged cultivation (Rus))

BORISOV, L.B.

Bacteriophage reproduction as related to the culture conditions.
Mikrobiologiya 28 no.6:933-937 N-D '59. (MIRA 13:4)

1. Leningradskiy sanitarno-gigiyenicheskiy meditsinskiy institut.
(BACTERIOPHAGE)
(SHIGELLA culture)

MAKHNACH, V.O.; LITVINOV, M.A.; BORISOV, L.B.; MATYKO, N.A.; SMIRNOVA-IKONNIKOVA,
M.I.

Antibacterial properties of starch iodide and its components.
Mikrobiologiya 29 no.3:451-454 My-Je '60. (MIRA 13:7)

1. Botanicheskiy institut im. V.L. Komarova AN SSSR, Leningrad.
(STARCH) (IODINE ORGANIC COMPOUNDS) (ANTISEPTICS)

BORISOV, L.B.

Deep cultivation of bacteria. Trudy LSGMI 46:287-294 '59.

(MIRA 13:11)

1. Kafedra mikrobiologii Leningradskogo sanitarno-gigiyenicheskogo
meditsinskogo instituta (zav. kafedroy - prof. M.N.Fisher).
(BACTERIOLOGY--CULTURES AND CULTURE MEDIA)

BORISOV, L.B.

Synthetic media for the culture of Flexner's dysentery bacilli.
Trudy LSGMI 46:305-308 '59. (MIRA 13:11)

1. Kafedra mikrobiologii Leningradskogo sanitarno-gigiyenicheskogo
meditsinskogo instituta (zav. kafedroy - prof. N.N.Fisher).
(SHIGELLA) (BACTERIOLOGY--CULTURES AND CULTURE MEDIA)

BORISOV, L.B.

"Marine microbiology (deep-sea)" by A.E. Kriss. Reviewed by
L.B. ~~Borisov~~. Izv. AN SSSR. Ser. biol. no. 4:637-640 J1-Ag
'60. (MIRA 13:8)

(MARINE MICROBIOLOGY) (KRISS, A.E.)

BORISOV, L.B.

Laboratory equipment for hypogeal cultivation of bacteria.
Analele biol 14 no.1:173-177 Ja-Mr '60.

MOKHNACH, V.O.; BORISOV, L.B.; LITVINOV, M.A.; MATYKO, N.A.

Antibacterial properties of iodine-polyvinyl alcohol. Mikrobiologiya
29 no. 4:600-602 J1-Ag '60. (MIRA 13:10)

1. Botanicheskiy institut imeni V.L. Komarova AN SSSR i
Leningradskiy sanitarno-gigiyenicheskiy meditsinskiy institut.
(ANTISEPTICS) (VINYL ALCOHOL)
(IODINE ORGANIC COMPOUNDS)

BORISOV, L.B.

Semicontinuous method in the production of Flexner's bacteriophage.
Zhur.mikrobiol.epid.i immun. 32 no.2:40-44 F '61. (MIRA 14:6)

1. Iz Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta.
(SHIGELLA PARADYSENTERIAE) (BACTERIOPHAGE)

BORISOV, L.B.; YAKOVLEVA, G.S.

Inhibiting effect of novoembichin on bacteriophages and viruses.
Vop. virus. 7 no.2:148-152 Mr-Apr '62. (MIRA 15:5)

1. Leningradskiy sanitarno-gigiyenicheskiy meditsinskiy institut.
(BACTERIOPHAGE) (VIRUSES) (EMBICHIN)

BORISOV, L.B.; PETUKHOVA, R.N.

Serological characteristics of phages of enteropathogenic
intestinal bacteria. Trudy LSGMI 66:195-198 '62. (MIRA 17:4)

1. Kafedra mikrobiologii Leningradskogo sanitarno-gigiyenicheskogo
meditsinskogo instituta (zav. kafedroy - prof. M.N.Fisher).

BORISOV, L.B.

Absorption and reproduction of coli phage O-111 and phage resistance
of Escherichia coli O-111:B4. Trudy LSGMI 66:199-206 '62.
(MIRA 17:4)

1. Kafedra mikrobiologii Leningradskogo sanitarr -gigiyenicheskogo
meditsinskogo instituta (zav. kafedroy - prof. M.N.Fisher).

BORISOV, L.B.; YAKOVLEVA, G.S.

Effect of chemical compounds on viruses and cells of tissue cultures.
Trudy LSGMI 66:264-269 '62. (MIRA 17:4)

1. Kafedra mikrobiologii Leningradskogo sanitarno-gigiyenicheskogo
meditsinskogo instituta (zav. kafedroy - prof. M.N.Fisher).

BORISOV, L.B.; MATYKO, N.A.

Antiphage activity of some chemical compounds. Trudy LSGMI 66:
270-274 '62. (MIRA 17:4)

1. Kafedra mikrobiologii Leningradskogo sanitarno-gigiyenicheskogo
meditsinskogo instituta (zav. kafedroy - prof. M.N.Fisher).

BORISOV, L.B.; ADEL'SON, L.I.; PETUKHOVA, R.N.

Biological characteristics of phages from enteropathogenic intestinal bacteria. Report No.1: Isolation, range of action and serological characteristics of 0111, 026 and 055 coliphages. Zhur.mikrobiol., epid. i immun. 33 no.3:94-98 Mr '62. (MIRA 15:4)

1. Iz Leningradskogo sanitarno-gigiyonicheskogo meditsinskogo instituta.

(BACTERIOPHAGE) (ESCHERICHIA COLI)

BORISOV, L.B.; MOGUCHIY, A.M.

Biological characteristics of phages of enteropathogenic intestinal bacteria. Report No.2: Morphology, adsorption, reproduction, and resistance of intestinal phages O 111 to the action of physical and chemical factors. Zhur.mikrobiol.epid.i immun. 33 77-83 My '62.

1. Iz Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta.

(ESCHERICHIA COLI) (BACTERIOPHAGE)

MOKHNACH, V.O.; BORISOV, L.B.; LITVINOV, M.A.; MAT'KO, N.A.

Antimicrobial properties of high-polymer iodine-containing
compounds. Trudy LSGMI 66:162-170 '62. (MIRA 17:4)

1. Kafedra mikrobiologii Leningradskogo sanitarno-gigiyenicheskogo
meditsinskogo instituta (zav. kafedroy - prof. M.N.Fisher).

BORISOV, L.B.

Biological characteristics of the phages of enteropathogenic intestinal bacteria. Report No.3: Biological properties of intestinal phage 026. Zhur. mikrobiol., epid. i immun. 40 no.2:20-25 F 1963. (MIRA 17:2)

1. Iz Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta.

GORISOV, L.B.

Comparative characteristics of the antiphage activity of
dichlorethylamines. Mikrobiologiya 33 no.1:79-84, Jan-F '64.
(MIRA 17:9)

1. Leningradskiy sanitarno-gigiyenicheskiy meditsinskiy institut.

BORISOV, L.B.

Antiphagoc action of ethylenimines. Biul. eksp. biol. i med. 57
no.3:78-81 Mr '64. (MIRA 17:11)

1. Kafedra mikrobiologii Leningradskogo sanitarno-gigiyenicheskogo
meditsinskogo instituta. Predstavlena deystvitel'nyy chlenom AMN
SSSR V.V. Parinym.

BORISOV, L.B.; TUKACHINSKIY, S.Ye.

Studies on the correlation between sarcosyl and serum proteins
using a bacteriophage model. Biul.eksp.biol.i med. 58 no.7:58-62
Jl '64. (MIRA 18:2)

1. Kafedra mikrobiologii Leningradskogo sanitarno-gigiyenicheskogo
meditsinskogo instituta i biofizicheskaya laboratoriya Leningrad-
skogo instituta perelivaniya krovi. Submitted April 29, 1963.

GUTNIK, M.A.; BORISOV, L.F.; NOVIKOV, I.K.; SPASSKIY, N.N.; OVCHINNIKOV,
A.N.; STOLYAROV, A.B.; KLAVIR, A.V.; GALKINA, V.I.; SHALFEYEV,
V.I.

Overall mechanization of decorative grinding and polishing operations. Prom. energ. 17 no.9:6-8 S '62. (MIRA 15:8)
(Grinding machines)

L 10451-67 EWT(m)/EWP(k)/EWP(t)/ETI IJP(c) JD/IM

ACC NR: AP6022508

SOURCE CODE: UR/0133/66/000/004/0348/0349

AUTHORS: Kaufman, M. Sh.; Shaykevich, S. A.; Kolmogorov, V. L.; Gleyberg, A. Z.;
Aleshin, V. A.; Moiseyev, G. P.; Vostrikov, G. A.; Likhtenshteyn, D. Ye.; Gasilov,
V. V.; Kuznetsov, B. N.; Borisov, L. M.

ORG: none

TITLE: Manufacture of two-layer pipes with continuous longitudinal channels between layers

SOURCE: Stal', no. 4, 1966, 348-349

TOPIC TAGS: pipe, steel, metal tube, metal forming

ABSTRACT: A method for manufacturing double layer steel Kh18N10T pipes with continuous longitudinal channels between the layers was developed. Two methods for the production of channels on the outer surface of the inner pipe were investigated--a rolling method and a cutting method. A schematic of the experimental installation is presented (see Fig. 1). It was found that both methods yielded pipes with smooth surfaces and uniform inner channels between the layers. The overall rate of pipe production, employing the cutting or drawing method, was 200 meters/hour. Double layer pipes having a diameter from 17 to 45 mm have been produced industrially. The following people took part in the experimental work: P. S. Ryshikov, N. A. Fedotovskiy, A. P. Nishkov, Ye. I. Tikhonov, and Ya. S. Grinberg.

UDC: 669.774.35

Card 1/2

L 10451-67
ACC NR: AP6022508

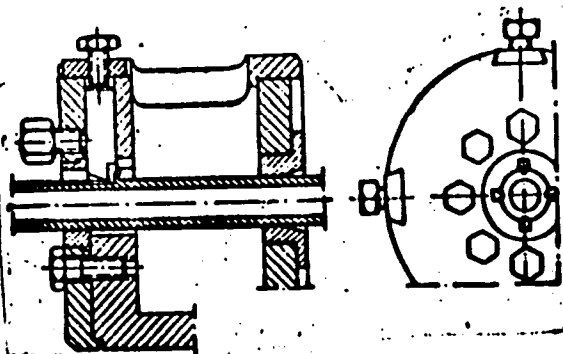


Fig. 1. Yoke for drawing longitudinal channels on the outer surface of pipes.

Orig. art. has: 3 graphs.

SUB CODE: 11/ SUM DATE: none

Bimetals

18~

Prod. 2/2 670

L 12064-66 EWT(d)/EWT(m)/EWP(w)/EWP(v)/EWP(k)/EWA(h)/ETC(m) IJP(c) WY/EM
 ACC NR: AP5021477 SOURCE CODE: UR/0046/65/011/003/0306/0312

AUTHORS: ^{44 55} Borisov, L. P.; ^{44 55} Tartakovskiy, B. D.

ORG: ^{44 55} Acoustics Institute AN SSSR, Moscow (Akusticheskiy institut AN SSSR) ⁵⁶

TITLE: ^{44 55} Propagation of flexural waves in a plate with thin obstacles

SOURCE: ^{44 55} Akusticheskiy zhurnal, v. 11, no. 3, 1965, 306-312

TOPIC TAGS: flexural vibration, sound propagation, acoustic impedance, mathematic matrix

^{14, 44, 55} ABSTRACT: Matrix-algebra methods are used to determine the propagation of flexural waves in structures (wagons, airplanes, ships, etc.) consisting of shells periodically crossed by obstacles. It is assumed that the width of contact between the obstacle (stiffening member) and the plate is small compared with the wavelength in the plate, so that the flexural waves can be regarded as being normally incident on the obstacle. The obstacles are characterized by their force and moment impedances. The form of the matrix of transmission of a wave through one obstacle is determined. A connection is established between the transmission and reflection coefficients and the coefficients of the

Card 1/2

UDC: 534.121.1:534.212

L 12064-66

ACC NR: AP5021477

matrix of transition through n obstacles. The transmission coefficient is calculated for a flexural wave passing through two obstacles with moment impedance N . A family of diagrams is presented, characterizing the dependence of the coefficient of transmission of the frequency for different values of the dimensionless moment impedance. Orig. art. has: 4 figures and 13 formulas.

SUB CODE: 20/ SUBM DATE: 30May64/ NR REF SOV: 001.


Card 2/2

PAULIN, Zdenek; ZHOLOBOVA, M.R.[translator]; BORISOV, L.P., red.

[Wonders of sound] Chudesa zvuka. Moskva, Energiia,
1965. 78 p. (MIRA 18:11)

BORISOV, L. R.

S/064/62/000/002/007/008
B105/B101

AUTHORS: Breyman, M. I., Burylov, V. A., Liakumovich, A. G., Lipkind,
R. A., Borisov, L. R.

TITLE: Production of an industrial batch of zeolite driers

PERIODICAL: Khimicheskaya promyshlennost', no. 2, 1962, 71

TEXT: In 1960 it was decided by the Catalyst Department of the Sterlitamakskiy zavod SK (Sterlitamak Plant SK) to produce a zeolite drier of the NaA type according to the process of the VNII NP. Peculiarities of the process: (1) Homogenizing and crystallizing of the sodium-aluminum silica gel are combined in an apparatus with propeller mixing device. Precipitation and crystallization conditions made it possible to obtain crystals of 4 to 6μ. (2) Washing was performed in a frame filter press with three filter layers. (3) The washed mass was predried in a steam-heated paste mixer. (4) Plasticizing and granulating of the mass were combined in one apparatus. On the basis of studies by the Gor'kovskaya opytnaya baza VNII NP (Gor'kiy Experimental Base of the VNII NP) and the plant, type "K" ("K") clay was used as binding agent.
Card 1/2

Production of an industrial...

S/064/62/000/002/007/008
B105/B101

Technical data of the product: Volume weight 0.73 g/cm^3 ; static moisture capacity 20.5% at 0.03% relative air moisture; dynamic moisture capacity 19.7% at 20°C. There is 1 table.

ASSOCIATION: Sterlitamakskiy zavod sinteticheskogo kauchuka (Sterlitamak Plant of Synthetic Rubber); Gor'kovskaya opytnaya baza VNII NP (Gor'kiy Experimental Base of the VNII NP)

Card 2/2

BREYMAN, M.I.; BURYLOV, V.A.; LIKUMOVICH, A.G.; LIPKIND, B.A.; BORISOV, L.R.

Production of an industrial batch of zeolite desiccant. Khim.
prom. no.2:147 F '62. (MIRA 15:2)

1. Sterlitamakskiy zavod sinteticheskogo kauchuka i Gor'kovskaya
opyt'naya baza Vsesoyuznogo nauchno-issledovatel'skogo instituta
po pererabotke nefi i gaza i polucheniyu iskusstvennogo zhidkogo
topliva.

(Zeolites)
(Drying agents)

BORISOV, L.V.

307/30-59-4-36/51

Razuvov, S. A., Candidate of Biological Sciences
Problems of Ecological Physiology (Problemy ekologicheskoy
fiziologii)

Техник Академиі наук СРСР, 1959, № 4, pp 121-123 (USSR).

[illegible]

Card 1/2

Page 2/2

BORISOV, L.V.; GAVRILOV, I.I.; FRANTOV, G.A.; SHATOV, I.V.;
POLYANTSEV, V.A., *otv. red.*; MARKOV, L.I., *red.*

[Use of precast reinforced concrete in the construction
of automobile roads for hauling lumber; materials for a
conference] *Primenenie sbornogo zhelezobetona na stroitel'-*
stve avtomobil'nykh dorog dlia vyvozki lesa; materialy k
soveshchaniyu. Moskva, TSentr. nauchno-issl. in-t mekha-
nizatsii i energetiki lesnoi promyshl., 1964, 71 p.
(MIRA 18:5)

BORISOV, M., polkovnik

Paratroop equipment of the U.S.A. and England. Tekh. i vooruzh.
no.5:86-89 My '64. (MIRA 17:9)

BORISOV, M. (Odessa)

The hero of socialist labor. Grazhd.av. 17 no.5:8 My '60.

(MIRA 13:7)

(Odessa--Woment in aeronautics)

(Solomatina, Zinaida Fedorovna)

BORISOV, M.

COUNTRY	: USSR	
CATEGORY	: Cultivated Plants. General Problems.	M
AES. JOUR.	: Zhurnal, No. 3, 1959, No. 10643	
AUTHOR	: Krylov, A., Khristov, M., Ivanov, M., Kydaniyakov, F.,*	
INST.	: -	
TITLE	: Principal Problems of the System of Farm Management in Aktubinskaya Oblast'.	
CRID. PUB.	: Peredov. opyt v k. kh. Kazakhstana, 1957, No. 6-7, 39-49.	
ABSTRACT	: No abstract.	

* Borisov, M.

CARD: 1/1

BORISOV, M., inzh.; SUYETIN, Yu., inzh.

Lubricating the bearings of wheel hubs. Avt.transp. 38
no.3:20-21 Mr '60. (MIRA 13:6)

1. Nauchno-issledovatel'skiy institut avtomobil'nogo transporta.
(Automobiles--Lubrication)

BRUSYANTSEV, N., kand.tekhn.nauk.; BORISOV, M., inzh.

The IANZ-2 synthetic calcium-sodium lubricant. Avt. transp.
38 no.9:24-26 S '60. (MIRA 13:9)

1. Nauchno-issledovatel'skiy institut avtomobil'nogo transporta.
(Lubrication and lubricants)

BORISOV, M.

"Cause of capacitance changes in a condenser with crystalline phosphorus in case of excitation."

IZVESTIIA. SERIIA FIZICHESKA, Sofia, Bulgaria, Vo. 6, Jan./Dec. 1956
(published 1957).

Monthly List of East European Accessions Index (EEAI), The Library of Congress, Volume 8, No. 8, August 1959.

Unclassified

S/194/61/000/012/060/097
D201/D256

26.1512
AUTHORS: Borisov, M., Kynev, St., Vateva, Ye. and Georgiyeva,
I.

TITLE: Electrically stimulated currents in irradiated mono-
crystals of cadmium sulphide

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika,
no. 12, 1961, 13, abstract 12G79 (Dokl. Bolg. AN,
1960, v. 13, no. 1, 23-26)

TEXT: This is a description of the results of analysis of elec-
trically stimulated currents (ESC), originated with the superim-
position of voltage on a previously irradiated CdS crystal. The
magnitude of ESC depends in general not on the intensity of irra-
diation, but on its dosage. With the increase of dose the ESC in-
creases up to a certain limit, beyond which saturation occurs. ✓
With the increase of the voltage applied to the crystal the ESC
increases monotonically so that it is impossible in this way to
detect the electron energy traps. The graphs of ESC against the

Card 1/2

Electrically stimulated currents ...

S/194/61/000/012/060/097
D201/D303

temperature exhibit 2 maxima (-80 and $+80^{\circ}\text{C}$), showing different levels of electron traps. The positions of thermally and electrically stimulated electric current maxima coincide with each other which shows a close interdependence of the two phenomena. / Abstractor's note: Complete translation. /

✓B

Card 2/2

33155
S/058/62/000/004/036/160
A058/A101

24 2/20

AUTHORS: Andreyev, M., Borisov, M.

TITLE: Parametric ion resonance in a plasma in a magnetic field

PERIODICAL: Referativnyy zhurnal, Fizika, no. 4, 1962, 77, abstract 4B581
("Dokl. Bolg. AN", 1960, v. 13, no. 6, 657 - 660, English summary)

TEXT: The authors observed ion cyclotron resonance for H^+ and He^+ ions in H_2O and He vapors under a pressure of $7 \cdot 10^{-2}$ mm Hg. The ratio of the cyclotron frequency of these ions to the resonance frequency observed in the experiment amounted to 1.9 and 2.9 for the H^+ and He^+ ions, respectively. In a magnetic field with an ion cyclotron frequency twice as great as the oscillation frequency of the HF field, parametric ion resonance was observed for the indicated ions.

D. P.

[Abstracter's note: Complete translation]

Card 1/1

9,4177 (1138)

26.2421

31517
S/058/61/000/010/087/100
A001/A101

AUTHORS: Borisov, M., Georgiyeva, I., Milyashev, M.

TITLE: On effect of infrared rays on photoconductivity of cadmium sulfide single crystals

PERIODICAL: Referativnyy zhurnal. Fizika, no. 10, 1961, 269, abstract 10E341
("Dokl. Bolg. AN", 1960, v. 13, no. 6, 661 - 664)

TEXT: The authors investigated the effect of preliminary infrared irradiation ($0.7-3.0 \mu$) on photocurrent in single crystals of CdS, induced by exciting monochromatic light in the range $0.45-0.55 \mu$. In investigated specimens were observed both effect of intensifying the photocurrent and effect of its quenching by infrared light, depending on the following factors: tension on the specimen, wavelength of the excitation light, and ratio of intensities of the excitation light and preliminary irradiation. It is supposed that to explain these effects, an assumption should be made that infrared light produces free holes in the crystal in addition to production, by the excitation light, of free electrons.

V. Sidorov

[Abstracter's note: Complete translation]

Card 1/1

X

BORISOV, M.; KUNEV, St.; GEORGIEVA, L.; VATEVA, E.

Electric stimulated currents in cadmium sulfide monocrystals.
Godishnik fiz mat 53 no.2:59-71 '58/'59 [publ. '60].

BORISOV, M., dots.

A conference on nuclear electronics. Fiz mat spisani~~e~~ BAN
4 no.4:312-312 '61.

1. Chlen na redaktsionnata kolegiia i zamestnik-gl. redaktor,
"Fizkio-matematichesko spisanie"

BORISOV, M.; MARINOV, M.; VASILEV, Iv.; MARINOVA, E.

Studies on the crystal counters of cadmium sulfide.
Izv fiz atom BAN 9 no.2:73-85 '62.

42751

B/503/62/010/001/001/001
B104/B186

9.4160

9.4170

AUTHORS: Borisov, M., Milyashev, M., and Minkova, V.

TITLE: Nature of electrically stimulated currents in CdS

SOURCE: Bulgarska akademiya na naukite. Fizicheski institut.
Izvestiya na Fizicheskiya institut s ANEB. v. 10, no. 1,
1962. 5-45

TEXT: In this review paper the characteristic features of electrically stimulated currents excited by light of different wavelengths are discussed. The discussion is based on data published between 1920 and 1960 covering the following subjects: (1) experimental investigation of the stimulation process; (2) excitation of a current which is electrically stimulated by light of a wavelength to the impurity absorption range; (3) excitation of a current which is electrically stimulated by light of wavelength corresponding to the fundamental absorption range; (4) effect of infrared radiation and of high voltage applied to the crystal on the electrically stimulated current; (5) conduction mechanism in CdS due to excitation by light of the above mentioned wavelengths, and comparison

Card 1/2

Nature of electrically stimulated ...

B/503/62/010/001/001/001
B104/B186

between theoretical and experimental data. A theory is developed for explaining the electrically stimulated currents which are excited by light having the frequency of the impurity absorption range. In this theory, electrons are assumed to be raised from the traps to the conduction band by an electric field. The electrically stimulated currents excited by light having the frequency of the fundamental absorption range are explained by the formation of a positive space charge (holes) around the cathode if the anode is irradiated. The electrically stimulated currents excited by irradiation with IR light are explained by the release of electrons from traps and of holes from activator levels. It is assumed that even weak electric fields (~ 1000 v/cm) raise a considerable number of electrons from the traps to the conduction band. There are 24 figures and 1 table. X

ASSOCIATION: Fiziko-matematicheski fakultet pri Sofiyskiya d"rzhaven universitet (Division of Physics and Mathematics at the Sofiya State University)

SUBMITTED: August 30, 1961

Card 2/2